

^{A2}
10. (Amended) The gel of claim 6 wherein a water-soluble polymer is further present during the polymerization of said polymer of acrylamide or derivative thereof.

12. (Amended) The gel of claim 6 wherein said gel is a capillary gel or a slab gel.

^{A3}
13. (Amended) The method of claim 1 wherein said electrophoretic matrix is said gel described in claim 6.

^{A4}
17. (Amended) An electrophoretic method of separating nucleic acids or PNA fragments in the presence of a polar organic solvent employing gel of claim 6 or a gel prepared according to the method of claim 13.

^{A5}
20. (Amended) The method of claim 16 wherein said nucleic acid is DNA or RNA.

^{A6}
Please add the following new claims:

21. (New) The method of claim 1 wherein said weak alkali solution is an aqueous solution of a hydrogencarbonate.